433 These differences are due largely to the effects of the Russian domination, which has profoundly influenced the productive structure of these States. Under the Russian Empire, it is true, the Provinces which are now Estonia, Latvia, and Lithuania were all primarily agricultural, and depended also to a great extent on the large reserves of timber which they each possessed. But it is important to emphasize that, whereas Lithuania depended entirely on timber and agriculture, this was not the case with Estonia or Latvia. [439] For, until the Russian Revolution, the economic importance of Riga, Reval, and Narva consisted in the large quantities of industrial products there manufactured from imported raw materials and supplied to the Russian Empire; and, though to a lesser extent, in their position as centres of the entrepôt trade between Russia and Western Europe. After 1918 their importance in this sense disappeared, and with it the means of paying for imports of raw materials—means formerly supplied out of the resources of a great Empire—which were needed if their industries were to continue to operate on anything like the old scale.

727 433 Thus the problems which the three States had to face on the establishment of independence were serious. Estonia and Latvia, though equipped both by their natural position and by their extensive industrial apparatus to become important manufacturing centres, lacked both the capital and the markets necessary to bring such an aim within the realm of practical politics. Moreover, in all three countries the actual devastation caused by the War was very considerable, and the demands of reconstruction were great. In addition, there were numerous other difficulties which hindered the reorganization of the economic system. Of these may be mentioned the question of agrarian reform and the splitting up of the large estates, such as those of the Baltic Barons. A further serious problem was that of communications, for the railways, built in the time of the Russian Empire, bore little relation to the needs of the three national States. In this Lithuania was perhaps the most severely affected; and the lack of a port under her unrestricted sovereignty was a further handicap. Lithuania, again, was somewhat impeded in her work of economic reconstruction by the persistence of the Vilna dispute with Poland, her most important neighbour. Thus, though not faced with the peculiar industrial questions confronting Estonia and Latvia, Lithuania had special problems of her own which made her task fully as difficult.

727 433 234 In the event, as will be seen, these problems were met by drastic solutions. Estonia and Latvia, at any rate until 1931, abandoned the hope of restoring their manufacturing industries to their pre-War position, and both countries were consequently forced to develop

other forms of production. Before the War Latvia, and to a smaller extent Estonia also, had supplied St. Petersburg with butter and other dairy produce. This trade, too, was lost after the Revolution, but the fact that it existed independently of foreign supplies suggested that dairy farming might be expanded so as to assume some of the importance formerly held in their economic systems by manufacturing industry. In this the development of the co-operative principle was of great assistance, and, during the period which ended in 1931, the two countries were able to make both ends meet by exploiting their forests and developing foreign markets for their butter and bacon, while their industries were still able to supply some of their own requirements of manufactured goods. Lithuania, though lacking manufacturing industries such as those possessed by the other two countries, followed a similar policy, and her success in finding foreign markets for her agricultural produce was the more remarkable in that the commercial organization of the country immediately after the War could not be compared with that of Estonia and Latvia. To sum up, then, the period 1918–31 described in the following section was one of reconstruction and of fundamental adjustment to the new conditions both inside and outside the Baltic. On the whole this process was highly successful, and it was no fault of the Baltic States that the conditions changed with the crisis of 1929–32.

Note: Except where otherwise stated, figures given in the tables are taken from the various statistical works published by the League of Nations, such as the Statistical Annuals, the annual memoranda on Foreign Trade and Balances of Payments, and the memoranda on Public Finance. Figures have occasionally been given in Swiss francs for comparative purposes. This is the old Swiss franc, the parity of which was 25·2215 to the £ gold, not the Swiss franc current since the devaluation of September 1936.

PART I: GENERAL FEATURES OF THE POST-WAR ECONOMY OF THE BALTIC STATES, 1919–30

I. THE PRODUCTIVE SYSTEM, 1919–30

BEFORE the growth of the productive system in this period is described, reference must be made to two developments: agrarian reform and the expansion of the co-operative system.

1. SPECIAL FEATURES

(i) *Agrarian Reform.*[1]

Although the growth of peasant ownership had proceeded rather more quickly in the Baltic Provinces than in the rest of Russia, a very large proportion of the land was still owned by a few large

[1] For the political effects of this see above, pp. 29–30.

423 433 particularly noticeable where the larger estates of the Baltic Barons had been split up—chiefly in Estonia and Latvia. Here, for example, farm buildings were often separated by the redistribution from the land which they had formerly served. Moreover, an entirely new class of landowners was called into being. These new small-holders were often ignorant of scientific agricultural methods, and were nearly always without means. It can therefore be seen that a whole series of problems was created by the reforms, which, throughout the period, it was the chief objective of agricultural policy to solve. The solution was found largely in the extension of the co-operative system.

474 Before the War there were numerous agricultural societies in existence in Estonia, Courland, and Livonia, and to a smaller extent in Lithuania. The idea, therefore, was not new. What was new was the notion that the pre-War agricultural associations could be developed to the point where they became the central pivot of the [234] entire agricultural organization. The pre-War functions of these societies had been to organize savings banks, to purchase machinery for the use of members, to promote the use of artificial fertilizers, to pay for instructors, and not least to deal on the co-operative system in dairy produce. The last-named activity was, of course, essentially suited to the new conditions after the War, which had created a large number of small-holders, and it is in this direction that the development of the co-operative system was most remarkable.

474 234 439 *Estonia.* Co-operation developed in Estonia less during this period, perhaps, than in the other two countries, except as regards dairy farming. However, co-operative dairies increased from 60 in 1918 to 331 in 1929, and the two co-operative marketing associations soon succeeded in obtaining a market for Estonian butter abroad. Much encouragement was given by the Government, particularly as regards grading; and, by the end of the period, between 60 and 70 per cent. of Estonia's exports of butter was in the hands of these two societies. There was also a considerable extension of co-operative buying abroad,[1] mainly of agricultural machinery resold by the retail societies, while the number of societies which were formed to enable members to obtain the use of agricultural machinery increased from 28 in 1914 to about 800 in 1929. In addition, the co-operative system greatly aided the production and export of bacon, eggs, and potatoes. On the whole, however, Estonia left development rather more to the State and to individual enterprise than did Latvia or Lithuania.

000 *Latvia.* As in Estonia, the co-operative system of Latvia had been

[1] Through the Estonian Co-operative Wholesale Society, known as the E.T.K.

Latvia. As in Estonia, the co-operative system of Latvia had been somewhat highly developed before the War. However, the disorganization caused by the War and the inflation made a fresh start necessary. There was a rapid increase of consumers' co-operatives in 1920 and 1921, followed rather later by a similar increase in co-operative credit societies and co-operative dairies. On the whole, development was rather uneven, owing to the enormous demand for agricultural machinery, seed, and plant resulting from the devastation of the War; but a large group was soon evolved which was known as *Konsums*. This group lent money on the security of land, supplied farmers on credit with agricultural and dairy machinery and artificial manure, and was at one period commissioned by the Government to buy grain and flax for export purposes. Apart from the expansion of *Konsums* during these years the most notable feature was the growth of co-operative dairies, which by the end of the period numbered more than 400, with a total membership of more than 20,000.

Lithuania. The growth of co-operation in Lithuania was rather greater, and the field covered rather wider, than in the other two countries. This may perhaps be explained by the almost entire absence of any financial organization in Lithuania immediately after the War, which was not the case in the other countries. The growth of co-operation was very rapid, and by the end of 1927 there were no less than 2,089 co-operatives in existence, 640 of which were consumers' societies, 473 dairy co-operatives, and 587 credit co-operatives. The export of Lithuanian butter on the scale achieved during this period would probably never have become possible without the assistance of the *Pienocentras* co-operative organization. The same may be said of the export of bacon and live stock which was effected through *Maistas*, an organization controlled by the agricultural co-operatives' union (*Lietukis*) and the Farmers' Union, both agricultural co-operatives which, in addition to fostering pig-breeding, supply the farmers with fertilizers, seeds, and agricultural machinery.

2. Agriculture

(i) *Cereals.*

The area under cereals was comparatively small except in Lithuania. During 1926–30 the average annual percentage of the total area under rye, oats, barley, wheat, and mealin was 10·5 for Estonia, 12·9 for Latvia, and 23·0 for Lithuania, but a proportionately larger area of Estonia and Latvia is covered by forest. However, both Estonia and Latvia were regularly compelled to import large quantities of grain during the period, chiefly rye, while Lithuania normally had a surplus for export.

248 this period were hemp and linseed, small quantities of which were exported.

TABLE 18. *Flax Production*

	Area under crop annual average ('000 ha.)			*Production annual average ('000 quintals)*			*Yield per ha. annual average (quintals per ha.)*		
	1909–13	*1921–5*	*1926–30*	*1909–13*	*1921–5*	*1926–30*	*1909–13*	*1921–5*	*1926–30*
Flax									
Estonia .	42	30	34	169	101	95	4·0	3·4	2·8
Latvia* .	70	53†	61	302	213†	196	4·3	4·0†	3·3
Lithuania* .	55	61	86	242	312	339	4·4	5·1	4·0

* Latvia: flax and hemp 1909–13; Lithuania: flax and hemp throughout. † 1923–5.

3. DAIRY FARMING AND STOCK-BREEDING

231 The comparative position of these countries can be seen from the
234 following table:

TABLE 19. *Statistics of Live Stock*

(i) *Total number of live stock*
(In 000's)

	*Estonia**		*Latvia**		*Lithuania*	
	1913–14	*1930*	*1913*	*1930*	*1913*	*1930*
Cattle . .	476	627†	912	1,026	918	1,170
Pigs . . .	275	290	557	523	1,358	1,136
Horses . .	165	204	320	359	451	559
Sheep . . .	518	467	996	873	1,152	1,097‡

(ii) *Number of live stock slaughtered*
(In 000's)

	Estonia		*Latvia*		*Lithuania*	
	1923	*1930*	*1923*	*1930*	*1923*	*1930*
Cattle . .	75	63	118	102	not	70
Calves . .	78	107	166	319	available	106
Sheep . . .	62	63	213	171		67
Pigs . . .	71	97	118	199		64

Note.—These figures relate to inspected slaughter-houses only.

* Estonia and Latvia: 1913 figures relate to a somewhat smaller area than that of the present States.

† Draught oxen only. ‡ Including goats.

231 727 The increase between 1913 and 1930 may be smaller than the great development of dairy farming after the War might lead one to suppose, but the number of live stock was very considerably reduced by the War itself; and the dislocation of the years immediately following 1918 led also to the result that many of the beasts were extremely poor. During the latter part of the period the Baltic

pp. 112

States were only just beginning to recover from the effect of these circumstances. 231 727

The Baltic States grow nearly all the fodder required for their cattle themselves. This consists largely of hay and mixed crops (meslin); as was seen, a large part of the total area of each country is pasture land. Roots were not often fed to cattle during the period. Great attention was paid to breeding by all three States, a subject which had not received much notice during the Russian period. In Latvia, for example, there were by 1928 over 500 associations formed for this purpose, and several hundred stud stations, most of which were assisted financially by Government departments, while imports of cattle for breeding purposes were a regular feature in the trade balance of all three countries. 232 246

There are comparatively few establishments exclusively devoted to dairy farming except for certain farms run directly by the co-operatives and the State. For the most part, the cattle are owned by individual peasants who deliver the milk to the co-operative dairies or bring their cattle to be milked. From this stage onwards dairy farming was developed during the period into a highly organized process, controlled largely, as was seen, by the co-operative system. This was not entirely a new thing in Estonia and Latvia, which before the War had supplied the Russian market, a substitute being found during this period in Great Britain. In Lithuania, however, it was an almost complete innovation. 234 474

The progress of dairy farming is illustrated by the following table:

TABLE 20. *Butter and Milk Production*

	Butter Production in metric tons (000's omitted) (Creamery or factory butter only)			*Milk* Production in hectolitres (000's omitted)		
	Estonia	*Latvia*	*Lithuania**	*Estonia*	*Latvia*	*Lithuania‡*
1925 . . .	7·2	7·9	0·3	4,823	†	92
1926 . . .	9·7	11·2	1·0	5,880	†	251
1927 . . .	10·9	12·0	1·3	6,118	†	312
1928 . . .	12·2	14·3	1·6	6,387	†	397
1929 . . .	13·7	17·0	3·1	6,334	12,650	725
1930 . . .	15·5	20·8	6·4	7,374	13,143	1,512

* Co-operative creameries only. † Figures not available.
‡ Milk delivered to dairies or factories.

A large proportion of the total production of butter is exported. The exact figure is difficult to ascertain, since complete figures for production are not always available. In Lithuania, during 1930, 6,000 metric tons of the butter manufactured by the dairies included in the above table, viz. 6,400 metric tons, were exported, the total export of 234 439

butter in that year being 7,400 metric tons. In 1930 Estonia exported in all 14,100 metric tons, as compared with the figure given above for production in that year of 15,500 metric tons, while Latvia exported 18,400 metric tons as compared with a production figure of 20,800 metric tons. Much progress was made with pig-breeding in Estonia and Latvia during the period; and considerable quantities of bacon were exported, mainly to Great Britain. Lithuania entered the field as a bacon exporter rather later than the two other countries, but by the end of the period her export trade was beginning to be considerable.[1] Poultry-breeding also was carried on intensively in all three countries, particularly Lithuania, which exported large quantities of eggs and poultry to Germany and Great Britain.

4. Timber

The percentage of the total area covered by forests was as follows:

	Percentage	State property as percentage of this
Estonia (1929). .	20	88
Latvia (1928). .	29	85
Lithuania (1927). .	17	?

The species vary considerably: in Estonia softwoods prevail to the extent of about 63 per cent., followed by birch (19 per cent.), aspen (10 per cent.), alder and others (8 per cent.), while in Latvia 77 per cent. of the total forest area is covered by softwoods, the remainder being birch (15 per cent.), aspen (4 per cent.), alder (3 per cent.), and others (1 per cent.). The Lithuanian forests consist of softwoods (62 per cent.), aspen (13 per cent.), birch (11 per cent.), alder (4 per cent.), and others (10 per cent.).

The forests of all three States, especially Latvia and Lithuania, suffered from the presence of hostile armies during the War, for large quantities of timber were felled as and when required, though it is true that this took place chiefly by the side of the roads and railways. After the War, too, the absence of agricultural buildings, and even of houses for the new small-holders, led to much abnormal felling of timber. In Lithuania, for example, a great deal of timber was sold at nominal prices or even given away to new settlers. Since the immediate post-War period, however, the respective Forestry Departments have established a more rational control over the timber resources of the State and also of those which are privately owned, for in most cases the owners in the latter category are municipalities or other public bodies.

[1] For the effects of this, see below, pp. 148–9.

1: Anonymous U-4 (no date)1938 RBl Baltic States

TABLE 35. *Flax Production*

(In thousand quintals)

	Average 1926–30	*Average 1931–5*	*Year 1936*	*Year 1937**
Estonia . . .	95	65	87	113
Latvia . . .	196	152	185	257
Lithuania . . .	339	214	288	308

* 1937: provisional figures only.

257 under Government assistance. By the end of 1936 there were two
249 such factories in operation in Lithuania and four in Latvia, and the
483 production of beet sugar had increased in Lithuania to an annual average of 128,000 quintals for 1931–5 as against practically nothing in the preceding five years. In Latvia the increase was from an annual average of 29,000 quintals in 1926–30 to 315,000 quintals in 1931–5.. In 1936 Lithuania's production was 243,000 quintals, and Latvia's 382,000; and imports of sugar in both countries had been reduced to almost negligible figures.

4. DAIRY FARMING AND STOCK-BREEDING

439 It has been seen how during the earlier period dairy farming and
234 stock-breeding existed largely for the export trade. The general
231 decrease of foreign trade as the result of the crisis, therefore, made it especially important for the Baltic States to give further encouragement to this branch of activity. But a large proportion of the exports of Estonia and Latvia had been taken by the United Kingdom and Germany; and it was consequently inevitable that, owing to the trade policies pursued by these countries, particularly the latter, there should be some decrease in production. Lithuania, on the other hand, did not enter the field as a producer on a large scale until just before the beginning of the crisis, and was, therefore, able to profit by the mistakes of the other countries. As the result, there has been an almost spectacular increase in her production both of butter and of bacon; and, whereas her exports of these commodities before 1930 could not be compared with those of the other two countries, she is now by far the largest bacon exporter of the three, though it is true that her exports have recently fallen off. Lithuania also exports more butter now than Estonia, and nearly as much as Latvia. For this the energetic policy pursued by the co-operative system is largely responsible, since the production and marketing both of bacon and butter is entirely in the hands of this organization.

The reason why it has been possible for Lithuania to succeed in spite of the fact that, unlike Estonia and Latvia, she has refused to depreciate her currency, is, perhaps, that the general standard of

1: Anonymous U-4 (no date)1938 RB1 Baltic States RB2

living is somewhat lower than in Estonia and Latvia, and the Lithuanian farmer can therefore accept prices which in the other countries would be considered too low. Further, Lithuania was fortunate in that there had been a great increase of her bacon exports to the United Kingdom just before the bacon quota was imposed in that country, with the result that the maximum of her bacon exports to Great Britain was fixed at a substantially higher figure than for the other two countries. Moreover, in recent years Lithuania's exports of bacon and butter have come to occupy a higher percentage of the country's total exports than in Estonia and Latvia, and it is consequently all the more important for the Government to foster the production and export of these commodities by subsidies, even if it means incurring a loss expressed in terms of national currency. The developments of the past few years are shown in the following tables:

TABLE 36. *Butter*

(a) EXPORTS TO ALL COUNTRIES
(In thousand metric tons)

	Estonia	*Latvia*	*Lithuania*
Annual average 1927–9	11·2	12·9	2·9
Year 1930	14·1	18·4	7·4
„ 1931	14·4	18·7	8·7
„ 1932	12·5	18·6	9·9
„ 1933	9·2	15·6	9·6
„ 1934	10·1	15·7	9·7
„ 1935	10·8	16·6	12·2
„ 1936	11·0	17·3	14·6
„ 1937	13·2	19·2	15·1

(b) TOTAL OF COWS
(In thousands)

	Estonia	*Latvia*	*Lithuania*
Year 1930	416	728	696
„ 1936	446*	880	763

* 1937.

TABLE 37. *Bacon*

(a) EXPORTS TO ALL COUNTRIES.
(In thousand metric tons)

	Estonia	*Latvia*	*Lithuania*
Annual average 1927–9	1·0	2·1	0·2
Year 1930	1·2	1·8	4·1
„ 1931	3·1	1·8	13·2
„ 1932	3·9	1·0	25·1
„ 1933	3·3	2·3	21·4
„ 1934	2·6	2·3	12·7
„ 1935	2·4	1·8	8·6
„ 1936	2·2	1·9	10·3
„ 1937	2·1	1·9	9·9

231

(b) TOTAL OF PIGS[1]
(*In thousands*)

	Estonia†	*Latvia*	*Lithuania*
Year 1913 . . .	275	557	1,358
„ 1930 . . .	290	523	1,136
„ 1936 . . .	379*	674	1,210

† 1913–14. * 1937.

439 234 231 More than half of the butter exports from these three countries, and practically all the bacon exports, are now taken by the United Kingdom.[2] It seems to follow that the United Kingdom is gradually assuming towards the Baltic States responsibilities very similar to those she has already assumed in the case of Denmark. As will be seen, the sterling received for the Baltic States' exports of bacon and butter is of vital importance to the exchange position.

5. MANUFACTURING INDUSTRY

433 471 The principal change in the industrial system since the crisis has been the need, already mentioned, to save foreign exchange by manufacturing inside the country as far as possible what was formerly imported. The policy has been pushed furthest, largely at the instigation of the State, in Latvia and Estonia, for in these two countries the industrial apparatus required for such an experiment was to a considerable extent already in existence. In Lithuania, however, this was not the case, and industrial self-sufficiency has consequently made far less progress than in the other two countries, although when and where it has been possible advances have been made in this direction. But, in each case, the degree to which this policy can succeed is strictly limited by the fact that all three countries lack not only the essential raw materials of industry such as coal, iron, non-ferrous metals, rubber, cotton, and wool, but also the capital required for attempting the expensive process of manufacturing substitutes.

The progress made by industrialization in Estonia and Latvia can best be judged from Table 38 opposite.

464 438 The increase of workers employed in the textile trade, in which some degree of self-sufficiency is perhaps easiest to achieve, will be noted. The increase of workers employed in 'other' industries in Estonia is due largely to the activity of the shale industry, since at the end of 1937 the extractive industries were employing about 4,500 persons; this also accounts largely for the increase in 'chemicals'. Included in 'other industries' are also nearly 3,000 persons engaged

[1] Pre-war figures for Estonia and Latvia relate to a somewhat smaller area than that of the present States.

[2] Figures are given in footnote on p. 156.

439 led to a reduction of her imports of bacon, and butter exports to that country had to be encouraged accordingly in order to make good the loss of free exchange.[1] What was perhaps of greater significance to the Baltic States than the cause of the fall of exports was its effect on imports. For, in the new conditions which now prevailed, it was vitally necessary, not only to reduce the value of imports *pari passu* with that of exports, but to achieve an export surplus in order to remedy the shortage of foreign exchange. This was the purpose of the numerous tariff and import quotas introduced during these years. The result of these efforts is shown below:—

TABLE 42. *Balance of Visible Trade*

(a) Amount in million Swiss francs. (b) Value of exports expressed as a percentage of that of imports.

	Estonia		*Latvia*		*Lithuania*	
	(a)	(b)	(a)	(b)	(a)	(b)
Yearly average 1928–30	− 5·4	97	−60·8	81	+ 1·9	101
Year 1931	+13·6	116	−12·5	93	− 2·3	98
„ 1932	+ 8·2	116	+12·3	114	+11·8	114
„ 1933	+ 6·2	117	− 9·5	90	+ 9·7	113
„ 1934	+11·9	125	− 9·4	90	+ 4·7	107
„ 1935	+ 9·5	117	− 2·4	98	+13·2	120
„ 1936	− 3·0	96	+12·3	114	+18·8	124
„ 1937	− 3·8	96	+17·9	113	− 2·2	98

As can be seen, the policy was highly successful in that the proportion of imports to exports was greatly reduced. In a wider sense this statement would have to be modified considerably. For, as was seen in the preceding section, this policy has involved certain radical changes in the productive system of these States, the ultimate advantages of which may be open to question.

[1] TABLE 41. *United Kingdom Imports of Bacon and Butter 1928–37.*

234 253 439

(In thousand £)

Year	*Imports of bacon from:*			*Imports of butter from:*		
	Estonia	*Latvia*	*Lithuania*	*Estonia*	*Latvia*	*Lithuania*
1928 . . .	154	559	7	628	397	11
1929 . . .	126	276	23	893	650	103
1930 . . .	94	198	252	641	332	134
1931 . . .	163	77	877	667	210	205
1932 . . .	208	46	1,181	338	450	263
1933 . . .	196	139	1,201	266	487	332
1934 . . .	190	164	926	350	421	403
1935 . . .	175	125	623	424	697	634
1936 . . .	173	145	758	493	827	884
1937 . . .	167	154	774	781	1,044	976

3: Simutis S-4 (no date) 1942 RB5 Lithuanians RB5
Baltic Countries RB2

From 1931 the number of dairies decreased while the number of skimming stations increased. This is due to the fact that some of the dairies were converted into skimming stations because of insufficient machinery. There were many instances of the merging of several small dairies into one large dairy, while the other units were converted into skimming stations.[35] Simultaneously with the increase in the number of dairying establishments, the quantity of milk and butter products increased very substantially.

It will be noted that milk and butter production in the other two Baltic countries, Latvia and Estonia, increased slowly, remaining almost constant in the latter, while in Lith-

TABLE 21

PRODUCTION OF DAIRY PRODUCTS IN THE BALTIC STATES

MILK

(*1,000 Hectoliters*)

YEAR	LITHUANIA [a]	LATVIA	ESTONIA
1928	397	12,650	6,387
1929	725	13,143	6,334
1930	1,512	13,424	7,374
1931	1,910	13,948	7,866
1932	2,430	14,161	7,877
1933	2,321	14,423	7,673
1934	2,537	15,548	7,821
1935	3,057	15,713	7,929
1936	3,773	15,868	7,791
1937 [b]	4,074	16,179	8,134
1938 [c]	5,133	(f)	(f)
1939	6,250	(f)	(f)

[35] *Ibid.*, p. 90.

3: Simutis S-4 (no date) 1942 RB5 Lithuanians RB5
Baltic Countries RB1

L
234
BC
234

BUTTER

(*1,000 Metric Tons*)

YEAR	LITHUANIA [a]	LATVIA	ESTONIA
1928	1.6	14.3	12.2
1929	3.1	17.0	13.7
1930	6.4	20.8	15.5
1931	8.1	22.2	16.1
1932	10.3	22.1	14.5
1933	9.9	18.6	11.5
1934	10.7	18.8	12.6
1935	13.2	20.5	13.3
1936	15.8	22.2	13.8
1937 [d]	17.1	21.7	15.9
1938 [e]	19.6	(*f*)	(*f*)
1939	19.9	(*f*)	(*f*)

[a] Only milk controlled by dairies is included in this table.
[b] L.N. 1937–38, p. 72.
[c] C.S.B., volumes for 1938 and 1939.
[d] L.N., 1937–38, p. 74.
[e] C.S.B., volumes for 1938 and 1939.
[f] Figures not available.

uania production increased more than tenfold during the ten-year period. The chief cause for this is that dairying in Latvia and Estonia was considerably advanced before the World War, which was not the case in Lithuania. During the recent years, before the Soviet occupation, however, Lithuania not only succeeded in reaching Estonia's level of butter production but even surpassed it. This situation shows how retarded dairying was in Lithuania as compared with Latvia and Estonia, and indicates the great achievement of cooperation in this particular field.

L
234
439

The expansion of dairying in Lithuania may be observed also from export figures, given in Table 22.

3: Simutis S-4 (no date) 1942 RB5 Lithuanians RB5
Baltic Countries RB1

TABLE 22

BUTTER EXPORTS IN THE BALTIC STATES[a]

(*In Metric Tons*)

YEAR	LITHUANIA	LATVIA	ESTONIA
1927	2,051	10,761	9,906
1928	2,643	13,006	11,222
1929	4,084	14,830	12,359
1930	7,357	13,430	14,066
1931	8,705	18,739	14,444
1932	9,926	18,598	12,531
1933	9,580	15,720	9,224
1934	9,671	15,701	10,118
1935	12,154	16,816	10,838
1936	14,629	17,291	10,955
1937	15,058	19,211	13,179
1938	17,413	23,464	14,732
1939	16,386	([b])	([b])

[a] C.S.B., volumes for 1927 to 1939.
[b] Figures not available.

LIVESTOCK

Livestock breeding is one of the branches of agriculture that suffered greatly in the World War. As soon as the war started in 1914 Russia requisitioned the best horses for the army. Then came the German army, which took what had been left by the Russians. Only horses unfit for army use were left.

To alleviate a great shortage of food caused by the Allied blockade the Germans requisitioned even the milk cows for slaughter. The reduction in livestock in Lithuania in 1919 as compared with 1913 was as follows: horses, 38 percent; cattle, 47.7 percent; pigs, 44 percent; sheep, 30 percent. The reduction of stock may be clearly seen from Table 23,

23: Shabad N-4 (no date) 1951 R1 Soviet Union R1
Baltic Countries RB1

on the right, and the Sheshupa (Šešupė) on the left. The Neman is navigable below Kaunas, and for shallow-draught vessels below Alitus (Alytus).

The Lithuanians represent about four fifths of the total population and, except for small Latvian and Belorussian minorities, make up the bulk of the rural population. The principal non-Lithuanian groups, Russians, Jews, and Poles, belong chiefly to the urban elements. The rural settlements are villages of a much larger type than the small farming communities generally found in Latvia and Estonia.

The long-contested Vil'nyus district was awarded to Lithuania following the partition of Poland in 1939. In 1940, when Lithuania joined the USSR as a union republic, it also annexed from the Belorussian SSR a narrow strip of territory with a predominantly Lithuanian population. Its present territorial configuration was completed in January, 1945, when it reacquired the Memelland, which had been ceded to Germany in 1939.

In 1950 Lithuania was divided into the oblasts of Vil'nyus, Kaunas, Klaypeda, and Shaulyay.

Agriculture is the principal branch of the economy. Grains cover the major part of the sown area, mostly rye and oats. Potatoes are an important crop in connection with the raising of hogs; flax and forage grasses (mainly clover) are sown in rotation. A few areas are under sugar beets. In addition to hogs, dairy cattle and poultry are extensively raised.

Dairy farming forms the basis for the chief industries of the republic. Butter and dairy plants, meat-packing plants, and tanneries are scattered throughout the entire region. Sugar is milled in a number of places, including Mariyampole (Marijampolė) and Panevezhis (Panevėžys).

Lumbering furnishes raw material for woodworking plants and paper mills. The glass and cement industry is being developed under the postwar Five-Year Plan; peat-based power plants are under construction at Kaunas and Shaulyay. Fisheries are important along the coast, near Klaypeda. Textiles are manufactured from imported silk, wool, and cotton. The only local fuel resource is peat, which is processed widely into briquettes. Building materials are quarried. To be noted also are the health resorts of Birshtonas (Birštonas) and Druskininkay (Druskininkai) on the Neman River, south of Kaunas, and the sand-dune resorts on the coast in the vicinity of Klaypeda. Meat, bacon, butter, flax, and lumber products are the principal export items.

23: Shabad N-4 (no date) 1951 R1 Soviet Union R1
Baltic Countries R&I

industry, which has plants scattered throughout all the small towns of the republic, mainly in the north and the west, leads the field. Meat packing, flour milling, and sugar refining are other activities. Next in importance are the engineering and the textile industries, which are concentrated at Riga and Liepaya. Also produced are matches, paper, rubber goods, chemicals, and tobacco. Fisheries are important along the coast, sardines, herring, and cod constituting the largest catch. Of all the Baltic republics, Latvia has the greatest tourist trade which descends yearly on the famous Riga beaches west of the city and the health resort (sulphur springs) of Kemeri near by.

Livestock raising is the chief agricultural occupation, with emphasis on dairy farming and milk, butter, and cheese production. Hogs are raised for bacon and other meat products, which together with eggs form the chief export items. The development of stock raising, as elsewhere in the Baltic Region, is favored by the humid climate and the abundance of meadowland. Crops are strongly slanted toward the production of fodder grasses and potatoes for stock feed. Grains cover about one half the sown acreage and are also partly used for forage. Rye, oats, and barley are emphasized. The main industrial crops are flax and sugar beets; garden crops are grown in a few suburban areas.

Power for the industry is furnished chiefly by the Kegums hydroelectric station on the Western Dvina, southeast of Ogre. This plant, which has a capacity of 55,000 kilowatts, is the only major water-power producer in the Baltic Region. The local peat supply, which is used in form of briquettes, is also of some importance in the industrial fuel scheme, although to a lesser extent than in Lithuania.

Riga, located on the Western Dvina, its center about 10 miles from the Gulf of Riga, of the Baltic Sea, is the largest city in the Baltic Region. An old city, dating from the early thirteenth century, it contains two thirds of all the Latvian industries. It is a large port, the terminus of a number of rail lines and of the timber flotage on the river. Its chief industries are its engineering enterprises, which produce rolling stock for electric trains, subways, and tramways, electrical equipment for automobiles, and telephone and radio apparatus. In its northeastern outskirts, on lake Kishozero, are superphospate and paper mills. Other products are textiles, glass, cement, rubber goods, and bicycles. Its port installations and shipyards extend along both sides of the river to the outer port of Daugavgriva, where most of the lumber is loaded. West of the city, between the Lielupe and the sea, on a narrow sand

1,500 feet. In the center lies the lake Vyrts-Yarv (Võrts Järv), which empties through the Emayogi (Emajõgi) into Lake Peipus on the eastern border of the republic. Lake Peipus is connected by the Narva River with the Gulf of Finland. The only other notable river is the Pyarnu (Pärnu), which flows southwest to the Gulf of Riga. The Estonian rivers are generally not navigable, but the numerous rapids provide a relatively large hydroelectric potential.

The Estonians represent more than 90 percent of the total population. The principal minorities are the Russians, mostly in the cities, and the Swedes, on the islands off the west coast and in the urban centers. As in Latvia, rural districts with a predominantly Russian population were separated from Latvia and annexed to the Russian SFSR. The territorial transfer which took place in 1945 involved the Petseri (now Pechory) district, which was incorporated by Pskov Oblast, and the narrow frontier strip on the right bank of the Narva River, which became part of Leningrad Oblast.

Estonia is considerably better supplied with mineral resources than are the other two Baltic republics. Most important are the oil-shale deposits between Lake Peipus and the Gulf of Finland, which form the basis of an industry characteristic of the local economy. The oil shale extends about sixty miles between Rakvere and Narva in reserves estimated at 1.5 to 2.5 billion tons. The yield is 20–30 percent. The product can be used as fuel in solid form, but produces a large proportion of ashes, reducing its caloric value. A method has been developed by which the ash residue can be converted into cement, thus rendering the use of the shale more economical. Distillation of the shale yields heavy oils and various other products used in the chemical industry. In recent years fuel gas has also been derived from the process. The center of the oil-shale district is Kokhtla-Yarve (Kohtla-Järve).

The textile industry assumes large proportions in the Estonian economy. There are large cotton mills at Narva and Tallin, and smaller weaving and flax-spinning enterprises in other towns. Forests, which cover 20 percent of the area, furnish lumber for match, paper, and furniture industries. Tyuri (Türi) is the chief paper-milling center. Blue clays along the Gulf of Finland coast supply a large cement mill at Kunda. The greater part of the metalworking industries is concentrated in Tallin, Tartu, and Pyarnu.

Dairy farming is the basic feature of the agricultural economy. Even more than in Latvia do meadows and pastures predominate over culti-

23: Shabad N-4 (no date) 1951 Rl Soviet Union Rl
Baltic Countries RBL

vated land. Most of the milk goes into butter production. Hog raising and poultry farming are other occupations. In addition to forage grasses and potatoes, grains are sown for animal feed (oats and barley) and for food (rye and wheat). Fishing is important along the seashore and in the large lakes.

Tallin (Tallinn—German *Reval*, Russian *Revel'*) lies on the coast of the Gulf of Finland, opposite Helsinki. It consists of the old city on the limestone plateau (at an elevation of 250 feet) and a new section on a coastal terrace adjoining the sea. An important, well-constructed port, it is also the seat of the major Estonian industries. Its principal activities are shipbuilding, machine construction (electrical equipment), cotton milling, paper milling, veneering, furniture making, and flour milling. The southwestern residential suburb of Nymme (Nõmme) lies within the city limits. The population in 1947 was 190,000.*

Tartu (German *Dorpat*, Russian *Yur'yev* or *Derpt*) is an old university city between lake Vyrts-Yarv and Lake Peipus. Its population was 50,000 in 1947.* Its agricultural machinery works, linen mills, and sawmills are important.

Pyarnu (Pärnu—German *Pernau*) is a port and commercial center at the northeast shore of the Gulf of Riga. Its lumber industry, with sawmills, match factories, and paper mills are notable.

Paldiaki (Baltic Port) is a port west of Tallin, which is being developed as a naval base guarding the entrance to the Gulf of Finland.

Rakvere (German *Wesenberg*) is a linen and tanning center halfway between Tallin and Narva.

Kokhtla-Yarve (Kohtla-Järve), a new industrial city, lies at the center of the Estonian oil-shale district. It developed mainly after the Second World War, when a large oil-shale distillery was built here. A new pipe line, laid during the current Five-Year Plan, will carry fuel gas from the distillery to Leningrad for industrial and domestic consumption. It is estimated that in 1950 the population will be 25,000 to 30,000. The major oil-shale mines of the district are at Kiviyli (Kiviõli), Kukruse, at the end of a rail spur passing through Kokhtla-Yarve, Kyava (Käva), just southeast of the city, Kokhtla (Kohtla), a rail junction to the south, Yykhvi (Jõhvi) and Akhtme (Ahtme), southeast of Yykhvi, and the newly developed town of Vivikond (Viivikond), southwest of Vayvara (Vaivara).

Narva, on the Narva River, between Lake Peipus and the Gulf of

* Estimate based on the Republic election.